

### REMARKS

Claims 1-76 are currently pending. Claims 1-13, 27-32 and 40-47 stand rejected and claims 14-26, 33-39, 48-76 are withdrawn. Claims 1-76 are cancelled and new claims 77-104 are presented herein. New claims 77-104 are intended to fall within the scope of the prior Group I election. Support for new claims 77-104 can be found throughout the specification and claims as originally filed. No new matter is added and entry is respectfully requested.

#### Objections to the Specification

As requested by the Examiner, a substitute specification accompanies this response. Marked-up and clean versions of the substitute specification are included. Applicant hereby states that no new matter has been added to the immediate prior version of the specification of record in preparation of the attached substitute specification.

The changes embodied in the substitute specification essentially comprise the changes listed under the sub-headings below.

*Removal of Underlining:* Underlining is treated as a typographical error and has been removed from the Substitute Specification and replaced by italics.

*Typographical Errors:* The specification has been thoroughly checked and all detected typographical errors have been removed in order to generate the Substitute Specification. The great majority of the typographical errors are artefacts associated with the way in which many – but not all – hyphens in the text of the PCT specification were handled when that specification was converted into ‘pdf’ format. These machine-implemented conversion errors are extremely difficult to reproduce in a marked-up version of the specification. As such, the applicant has attempted to correct all words that incorporate an inappropriately placed hyphen, as set forth in the specification on record with the USPTO. Similarly, where erratic spacing of the ‘pdf’ version led to some words having letters partly super-imposed on each other, such words have been deleted and replaced by themselves.

*Preliminary Amendments:* Changes effected by the preliminary amendments filed with the application have been incorporated in the substitute specification because the ‘immediate prior version of record’ is considered to be the specification as filed together with and incorporating the preliminary amendments. However, for clarity, the marked-up version of the substitute specification marks the preliminary amendments as if they were changes. This is because it appears from the current Office Action that the page numbers referred to in

the preliminary amendments may not correspond with those of the document on file at the Office.

*Insertion of Paragraph Numbers:* Paragraph numbers have been inserted in the clean Substitute Specification but not included in the marked-up version.

*Repagination:* The pagination of the substitute specification is necessarily different than the 'immediate prior version of record' but changes to the page numbers have not been shown in the marked-up version of the substitute specification.

*Bibliography:* Applicant does not propose to file a supplementary IDS including copies of relevant portions of the bibliographic references as it is thought that these references are not relevant to the issue of patentable novelty. The Bibliography was included so that a reader unfamiliar with this highly technical and unusual specialised field could obtain a useful and an informative introduction to the subject.

*Arrangement of the Specification:* The substitute specification has been re-arranged in accordance with the Examiner's request. To the extent that any of the specification headings and sections listed by the examiner are not relevant to the present application, they are not incorporated in the substitute specification.

*Re-conversion Homonyms:* This definition and the associated definition of 're-conversion homonym resolver' have been clarified in accordance with the Examiner's suggestion. The Examiner is also pointed to the use of these terms in Examples 1, 2, 3, 10, 15, 23 where they are further illustrated and clarified.

#### Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1-13, 27-32 and 40-47 stand rejected under 35 U.S.C § 112, second paragraph, as indefinite. Applicant regrets the many problems evident in the claims related to antecedent, structural and dependence issues. Correction of these problems has necessitated cancellation of all claims originally filed and the substitution of a new set of claims which, it is submitted, are now free of such formal defects. As requested by the Examiner, care has been taken to ensure that such errors are not present in the new set of claims.

Accordingly, the Applicant respectfully requests withdrawal of this rejection.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 1-3 stand rejected under 35 U.S.C § 112, first paragraph, as purportedly failing to comply with the enablement requirement. Claims 1-3 are cancelled herein, rendering this rejection moot. However, new claims 77-79 represent redrafted versions of cancelled claims 1-3. As described below, these new claims address the 35 U.S.C § 112, first paragraph related concerns noted by the Examiner with regard to cancelled claims 1-3.

Claims 77-79 do not present single means claims. These claims call for ‘computer-based text processor means for facilitating user familiarity’ involving processor means, display means and selector means that perform specific functions and that combine to enable a user to select and display processed texts that incorporate different amounts of visual clues to the identity of word shapes in a sample of text.

The word “degree” has not been used in the new claims in deference to the Examiner’s strong and repeated objections this term. However, it is respectfully submitted that the description makes the meaning and use of this term clear in a manner that is consistent and well-supported, and that the usage in the claims as filed was consistent. It is clear that degree is used in the specification in a comparative sense, not an absolute sense adopted by the Examiner. Thus, claim 1 called for “a plurality of non-standard texts that differ from one another according to the degree to which each said non-standard text incorporates clues ...” This comparative statement is clear and precise without the necessity to assign quantitative units of measurement to the degree that clues are incorporated. A person can readily determine whether one non-standard text has more or less clues than another.

For example, the use of degree as a comparative term is amply illustrated and clarified in many places in the description, including by graphic illustration in the Figures. Immediately after the first use of this term under ‘Outline of the Invention’ in the original specification, the following statement is made to clarify its meaning:

Where the standard text is alphabetical, the non-standard texts may differ from one another according to the degree to which their word-shapes incorporate phonetic clues. Where the standard text is logographic, the non-standard texts may differ from one another according to the degree to which they incorporate pictographic clues.

Moreover, specific examples of variation of degree in alphabetic writing systems are described with reference to and illustrated by Figures 5 (a) to (g) and Figure 15, while specific

examples of variation of degree in logographic writing systems are described with reference to and illustrated by Figures 10, 11 and 12.

As already clear, the variable that is the subject to variation of degree is ‘clues’ – more specifically ‘visual clues’ – that convey ‘information about the identity of word-shapes’. They can vary quantitatively – i.e., in number – and qualitatively; that is, by their degree of phonetic or pictorial explicitness. With regard to quantitative variation, see FIG 5 and also FIG 15, the discussion of Example 5 at pages 19-22 (original specification), and of Example 8 pages 23-24 (original specification), plus the definitions of *display-option* [page 2, line 33- page 3, line 3 (original specification)] and *converter* [page 3, lines 8-16 (original specification)]. With regard to qualitative variation, note the remark ‘These display-options offer various amounts of additional phonetic information, and may display or distinguish it’ [page 11, lines 4-5 (original specification)]. While “conspicuousness” is referred to elsewhere also [page 16, line 43; page 17, line 3; page 29, line 25; page 35, line 11 (original specification)], “visual saliency” [page 19, line 7; page 24, line 8 (original specification)] and “phonetic/pictographic explicitness” [page 9, line 31 (original specification)] are also used. Note also the definition of additional phonetic information as “phonetic information which either goes beyond or corrects or clarifies that which is supplied or suggested in the conventional writing system or spelling system of a given language.” Page 12, lines 12-14 (original specification).

It should be noted that in any commercially applicable system, the desirable degree, level or amount of difference between processed texts / display options would depend on (a) the language involved, (b) the intended market (whether, for instance, adult learners of English as a Second Language or English-speaking schoolchildren or “reluctant readers”) and (c) what that market was prepared to pay (since the creation of additional display-options with a lesser degree of difference between them would impose a programming cost).

Based on the foregoing, the Applicant respectfully requests withdrawal of this rejection.

Rejection Under 35 U.S.C. § 102(e)

Claims 1-3 stand rejected under 35 U.S.C. § 102(e) as purportedly anticipated by U.S. Patent No. 6,363,342 (“*Shaw et al.*”).

As claims 1-3 are cancelled herein, this rejection is rendered moot. To ensure responsiveness, the Applicant notes that, as explained below, *Shaw et al.* fails to anticipate new claims 77-104.

*Shaw et al.* is concerned with a system for combining speech recognition and speech synthesis technologies to generate “word-pronunciation pairs” from “spelled word input” for the purpose of populating pronouncing dictionaries. Applicant’s system is not at all concerned with generating word-pairs for a dictionary and *Shaw et al.*’s system is not at all concerned with generating multiple versions of a sample text with graded sets of clues to facilitate user familiarisation with a standard writing system.

Despite this, Claim 1 – together with dependent claims 2 and 3 – were found anticipated by *Shaw et al.* because the Examiner considered that in the *Shaw et al.* system, “a list of n-best suggested phonetic transcriptions (reflecting a degree of the clues to identity) is generated based upon (corresponding to) the spelled word input.” *Shaw et al.*’s “n-best” list is a list of alternative pronunciations of an input word in which all members are of equal rank. There is no gradation of phonetic clues from one member to the next. Thus, *Shaw et al.*’s system cannot be equated with Applicant’s in the manner suggested by the Examiner. Nevertheless, claim 1 has been re-written to avoid the use of ‘degree’ and to spell out important differences of intent and function in greater detail. Specifically, new claim 77 now calls for:

- “A system for facilitating user familiarisation with word-shapes of text written in a standard writing system of a human language.” In contrast, *Shaw et al.* discloses a system that assists a user who must be familiar with a standard writing system and language in order to generate a pronouncing dictionary data-base.
- “. . . each processed text comprises word-shapes that correspond in sequence with the word-shapes of the sample.” In contrast, the function of *Shaw et al.*’s system is to break that sample down into word-pronunciation pairs in order to populate a pronouncing dictionary. Moreover, *Shaw et al.*’s ‘spelled input’ could not be the multi-word sample required by Applicant’s system. The purpose and operation of Applicant’s claimed system would be frustrated if word sequences in the sample were presented as *Shaw*-style word-pairs, with both members of each pair present and with one member of the pair invariably shown in a full phonemic re-spelling.

- New claims 77 and 92 are limited to the generation of “a plurality of processed texts from a common sample of text . . . such that each of said processed texts comprising comprises word-shapes that correspond in sequence with the word-shapes of the sample.” There is no equivalent of this feature found in *Shaw et al.* Indeed, such a feature would totally frustrate *Shaw et al.*’s aim of populating a pronouncing dictionary. For example, taking *Shaw et al.*’s spelled input to be Applicant’s sample text and equating one of Applicant’s processed texts with *Shaw et al.*’s phonetic transcriptions of spelled inputs (as suggested by the Examiner) results in *Shaw et al.*’s phonetic member of each ‘word-pronunciation pair’ becoming a multi-word phonetic transcription of no value in the *Shaw et al.* system.
- “. . . said processed texts differ from one another by the amount of said visual clues incorporated therein.” If, as asserted by the Examiner, Applicant’s “processed texts” and *Shaw et al.*’s “phonetic transcriptions” of “spelled inputs” are equivalent (despite the strong contrary arguments advanced above), then it is transparently clear from *Shaw et al.*’s PROCESS [Fig. 2] example that the multiple transcriptions of this spelled input do not differ in the ‘degree of phonetic information’ (Applicant’s claim 1) or in the “amount of visual clues” (Applicant’s claim 77) but purely in the fact that they are alternative “suggestions” for word-pronunciation pairs. Such suggestions do not differ from one another in the amount (or degree) of visual clues (or phonetic markers); nor in their divergence from the “spelled input.”

It is therefore respectfully submitted that the subject matter of new claims 77-104 is clearly not anticipated by the disclosure of *Shaw et al.* As such, the Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(e).

#### Rejections Under 35 U.S.C. § 103(a)

Claim 3 stands rejected under 35 U.S.C. § 103(a) as purportedly obvious over *Shaw et al.* in view of U.S. Patent No. 4,777,600 (“*Saito et al.*”). As claim 3 is cancelled herein, this rejection is rendered moot. To the extent that any new claim corresponds to cancelled claim 3, these claims are distinguishable from *Shaw et al.* for at least reasons noted above. Citation of *Saito et al.* does not cure these deficiencies.

Claims 4-5 stand rejected under 35 U.S.C. § 103(a) as purportedly obvious over *Shaw et al.* As claims 4-5 are cancelled herein, this rejection is rendered moot. To the extent that

any of the new claims correspond to cancelled claims 4-5, these claims are distinguishable from *Shaw et al.* for at least reasons noted above.

Claims 7 and 27-30 stand rejected under 35 U.S.C. § 103(a) as purportedly obvious over *Shaw et al.* in view of U.S. Patent No. 6,005,549 ("*Forest*"). As claims 7 and 27-30 are cancelled herein, this rejection is rendered moot. To the extent that any of the new claims correspond to cancelled claims 7 or 27-30, these claims are distinguishable from *Shaw et al.* for at least reasons noted above. Citation of *Forest* does not cure these deficiencies. With regard to new claims 83 and 84 (roughly corresponding to claim 7), these claims are further distinguished, as pointed out above, by the limitation that the processed texts and the enriched text (respectively) have the word-shapes and spelling of the sample, which is contrary to the teaching of *Shaw et al.* and not disclosed therein. Moreover, with regard to claims 96 and 97 (which roughly correspond to cancelled claims 28-30), these claims include the limitations that:

“the step of generating each processed text is performed in such a manner that letters and spelling of the sample are retained in each processed text and that said phonetic markers are incorporated in each one of said processed texts by retaining the letters and spelling of the word-shapes of the sample but varying the appearance of the letters of the word-shapes of the sample.”

As noted above in relation to claims 83 and 84 (which have similar restrictions), these limitations clearly distinguish claims 96-97 over *Shaw et al.* because they are not found in, are contrary to the teaching of, *Shaw et al.* Claim 97 is dependent on claim 96 and imports all the restrictions of claim 96.

Claim 8 stands rejected under 35 U.S.C. § 103(a) as purportedly obvious over *Shaw et al.* in view of U.S. Patent No. 6,289,085 ("*Miyashita et al.*"). As claim 8 is cancelled herein, this rejection is rendered moot. To the extent that any of the new claims correspond to cancelled claim 8, they are distinguishable from *Shaw et al.* for at least reasons noted above. Citation of *Miyashita et al.* does not cure these deficiencies.

Claim 32 stands rejected under 35 U.S.C. § 103(a) as purportedly obvious over *Shaw et al.* in view of *Forest*. As claim 32 is cancelled herein, this rejection is rendered moot. To the extent that any of the new claims correspond to cancelled claim 32, they are distinguishable from *Shaw et al.* for at least reasons noted above. Citation of *Forest* does not cure these deficiencies.

Based on the forgoing, the Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 103(a).

**CONCLUSION**

In light of the above amendments and remarks, Applicant respectfully submits that all pending claims as currently presented are in condition for allowance. Favorable reconsideration is respectfully requested.

In the unlikely event that the Patent Office determines that extensions and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or fees due to our Deposit Account No. 18-1260, referencing Docket No. 22529-00201. Any refund should be credited to the same account. The Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,



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